

WHAT IS CLAIMED IS:

1. A float valve device comprising:
  - a valve case; and
  - a float valve member arranged to acts upward and downward in the valve case; and
  - a angle regulating unit wherein:
    - the valve case and the float valve member are injection-molded of a resin;
    - the valve case includes a valve chamber, in which the float valve member is arranged, a partition wall portion formed in the upper portion of the valve chamber, and a communication hole formed in the partition wall portion;
    - the float valve member acts upward and downward according to the level of a liquid to flow into the valve chamber and includes a crest portion for closing the communication hole when it abuts against the partition wall portion;
    - the inner circumference of the communication hole of the valve case is deformed to a first direction with respect to the roundness, as caused by the gate position at the injection molding time;
    - the outer circumference of the crest portion of the float valve member is deformed to a second direction with respect to the roundness, as caused by the gate position at the injection molding time;

an allowable angle of the float valve member related to the valve case is so set that the first direction and the second direction is substantially aligned; and

the angle regulating unit interposed between the valve case and the float valve member for preventing the angle of the float valve member with respect to the valve case from varying over the allowable angle when the float valve member acts upward and downward.

2. A float valve device according to Claim 1, wherein:  
the angle regulating unit includes:

a plurality of vertically extending parallel ribs formed on one of the inner circumference of the valve case and the outer circumference of the float valve member; and

a brim formed on the other of the inner circumference of the valve case and the outer circumference of the float valve member and adapted to be fitted in the spacing of the ribs;  
and

the spacing between the ribs to fit the brim therein is made wider than the spacings between the remaining ribs so that the brim may be unable to be fitted in the spacings between the remaining ribs.

3. A float valve device according to Claim 2, wherein:  
the ribs are formed on the inner circumference of the

valve case;

the brim is formed on the outer circumference of the float valve member; and

the ribs, which are located between the ribs on the inner circumference of the valve case for fitting the brim therein, are formed within such a partial range only on the upper side as not to obstruct the upward and downward actions of the float valve member.